



320 O'Bryan Lane • Van Buren, AR 72956  
Office: 479.474.7916 • Fax: 479.474.2450  
Surveying • handa-inc.com

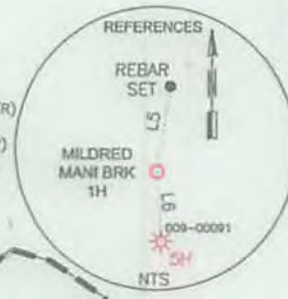
LINE	DESCRIPTION	DISTANCE	DESCRIPTION	MONUMENT
L1	S 88°36'57" E	1442.78'	SHL TO LANDMARK	FOUND IRON PIPE
L2	S 47°09'58" E	997.43'	SHL TO LANDMARK	FOUND IRON PIPE
L3	S 83°53'18" W	1243.07'	SHL TO TPL	
L4	N 22°57'31" W	5828.59'	TPL TO BHL	
L5	N 09°12'02" E	156.24'	SHL TO REF. PNT.	1/2" REBAR SET
L6	S 03°41'55" E	34.26'	SHL TO REF. PNT.	MILDRED MANI BRK SH WELL HEAD 009-00091

Latitude: 40°17'30"

Longitude: 80°35'00"

GRID NORTH  
UTM, NAD83 DATUM, ZONE 17, US FT

**WW-841 LEGEND**  
(S) SURFACE OWNER  
(R) ROYALTY OWNER  
(TMP) TAX MAP PARCEL NUMBER  
(L) LEASE NUMBER

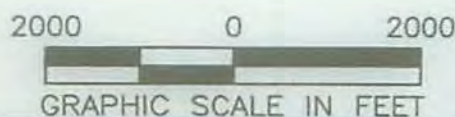


SURFACE HOLE LOCATION (SHL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.253982°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,619,485.621
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,456,028.129
EASTING: 1,754,924.183	
"TURNING POINT" LOCATION (TPL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.253634°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,619,353.274
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,455,987.790
EASTING: 1,753,688.183	
BOTTOM HOLE LOCATION (BHL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.268400°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,624,720.167
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,457,623.622
EASTING: 533,832.251	

**NOTES ON SURVEY**

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 1000 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

SURVEYED BY TRIPLE H ENTERPRISES, WEST UNION, WV.



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 667

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200  
PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

COMPANY: SWN Production Company, LLC  
MILDRED MANI BRK  
OPERATOR'S WELL #: 1H  
API WELL #: 47 09 00158  
STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS  LIQUID INJECTION STORAGE SHALLOW   
WATERSHED: BUFFALO CREEK ELEVATION: 1073.0'  
DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: STUEBENVILLE EAST WV.  
SURFACE OWNER: MILDRED MANI & ERIK PHILIP BAUER ACREAGE: 95.00±  
OIL & GAS ROYALTY OWNER: MILDRED MANI & ERIK PHILIP BAUER ACREAGE: 95.00±  
DRILL  DRILL DEEPER REDRILL FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION PERFORATE NEW FORMATION  
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,681' TVD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL  
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300  
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

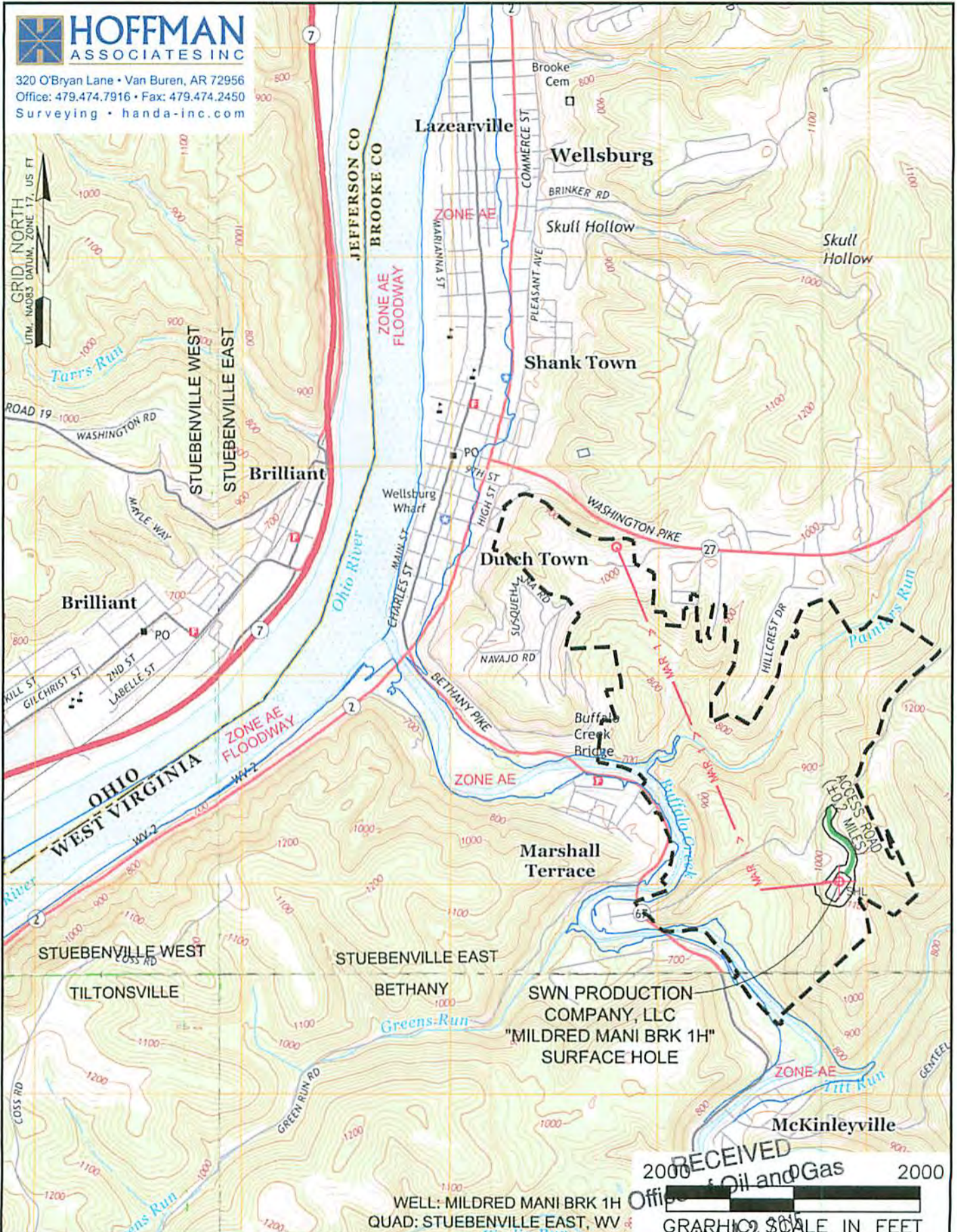
LEGEND:	REVISIONS:	DATE:
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	Δ REVISED TVD & TMD, 07-22-2015	05-01-2015
☆ EXISTING / PRODUCING WELLHEAD		
⊗ ABANDONED WELL		
⊗ PLUGGED & ABANDONED WELL		
△ CUT CONDUCTOR		
--- LEASE BOUNDARY		
--- 500' DHP BUFFER		
- MAR 1 > - MARCELLUS DHP		
--- ABANDONED PATH		
		DRAWN BY: S. HUTSON
		SCALE: 1" = 2000'
		DRAWING NO: 58995
		WELL LOCATION PLAT

07/31/2015



320 O'Bryan Lane • Van Buren, AR 72956  
 Office: 479.474.7916 • Fax: 479.474.2450  
 Surveying • handa-inc.com

GRID NORTH  
 UTM, NAD83 DATUM, ZONE 17, US FT



RECEIVED  
 2000  
 Oil and Gas  
 2000  
 GRAPHIC SCALE IN FEET

WELL: MILDRED MANI BRK 1H  
 QUAD: STUEBENVILLE EAST, WV

NAME AND DISTANCE TO THE NEAREST STREAM: TITT RUN IS LOCATED ±0.31 MILES SOUTHEAST OF THE DRILL PAD.		STREAM CROSSING COORDINATES (NAD 83): NO NEW CROSSINGS.		COMPANY: <b>SWN</b> Production Company, LLC	
WELL RESTRICTIONS: WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET		OPERATOR'S: <b>MILDRED MANI BRK</b>		WV Department of Environmental Protection	
FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM UNINCORPORATED AREA OF BROOKE COUNTY, WEST VIRGINIA; MAP NUMBERS 54009C0090 D, 54009C0130 D, & 54009C0088 D; EFFECTIVE DATE APRIL, 19, 2010.		WELL #: 1H		LOCATION: BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA	
LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ⊗ EXISTING / PRODUCING WELLHEAD ⊘ ABANDONED WELL ⊙ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR		SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.253982° LONGITUDE: -80.589595°		DATE: 05-01-2015	
○ EXISTING WATER WELL — ACCESS ROAD — ACCESS ROAD TO PREV. SITE — HIGHWAY/INTERSTATE — COUNTY ROAD		BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.268400° LONGITUDE: -80.602089°		DRAWN BY: S. HUTSON SCALE: 1" = 2000' DRAWING NO: 58663 TOPOGRAPHIC MAP	
REVISIONS:		DATE: 05-01-2015		PROPERTY NUMBER 2501162109 PAD ID 3001156744	

07/31/2015